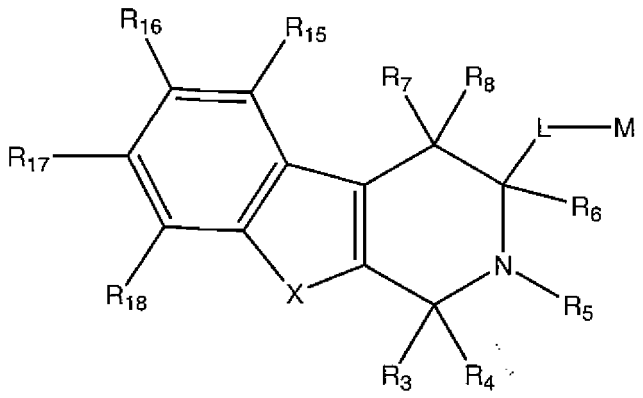
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing Of Claims

1-9. (Cancelled)

10. (Currently amended). A compound comprising the formula:



wherein

R_3 and R_4 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, and a thiocarbonyl group, or where R_3 and R_4 are taken together to form a ring, in each case unsubstituted or further substituted through available valencies;

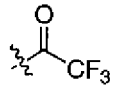
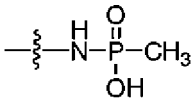
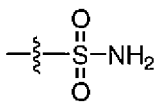
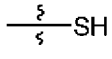
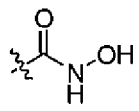
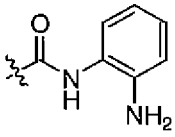
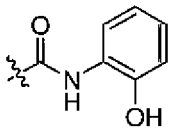
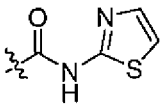
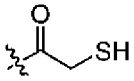
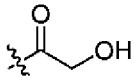
R_5 and R_6 are each independently selected from a group of substituents comprising a moiety attached to the ring nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group, or where R_5 and R_6 are taken together to form a 3, 4, 5, 6, 7 or 8 membered ring, in each case unsubstituted or further substituted through available valencies;

R_7 and R_8 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or where R_7 and R_8 are taken together to form a substituent comprising a moiety attached to the ring carbon selected from the group consisting of a carbonyl, thiocarbonyl, imine, alkene and ring, or where R_6 and R_7 are taken together to form a 3, 4, 5, 6, 7 or 8 membered ring, in each case unsubstituted or further substituted through available valencies;

R_{15}, R_{16}, R_{17} and R_{18} are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, except where R_{15} and R_{16}, R_{16} and R_{17}, and/or R_{17} and R_{18} are taken together to form a 3, 4, 5, 6, 7 or 8 membered ring, in each case unsubstituted or further substituted through available valencies;

X is selected from the group consisting of O, S, and NR_{14}, where R_{14} comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, hydroxyl, alkyl, aromatic ring, alkoxy, aryloxy, a carbonyl group, a thiocarbonyl group, and a sulfonyl group, in each case unsubstituted or further substituted through available valencies;

M is selected from the group consisting of:











; and

~~L is a substituted or unsubstituted chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent~~ L is a leader group moiety separating the M substituent from the carbon ring atom alpha to L, wherein the number of backbone atoms of the leader group moiety separating the M substituent from the carbon ring atom alpha to L is between 3 and 12.

11-15 (Cancelled)

16. (Previously amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted C_1-C_{10} alkyl, aminoalkyl, or oxaalkyl.

17. (Previously amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted branched C_1-C_{10} alkyl, aminoalkyl, or oxaalkyl.

18. (Original). A compound according to claim 17, wherein the C_1-C_{10} alkyl, aminoalkyl, or oxaalkyl further comprises a substituent selected from the group consisting of an alkyl, aromatic ring, cyano group, halogen, and carbonyl group.

19. (Original). A compound according to claim 17, wherein the C_1- C_{10} alkyl, aminoalkyl, or oxaalkyl further comprises a substituted or unsubstituted aromatic ring.

20. (Previously amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted aromatic ring.

21. (Previously amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted phenyl ring.

22. (Previously amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted heteroaryl.

23. (Currently amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted heteroaryl selected from the group consisting of furan. thiofuran, pyrrole, pyrazole, isoimidazole, triazole, isoxazole, oxazole, thiazole, isothiazole, oxadiazole, oxatriazole, pyridine, pyridazine, pyrimidine, pyrazine, triazine, benzofuran, isobenzofuran, benzothiofuran, isobenzothiofuran, indole, benzodioxolane, isobenzazole, quinoline, isoquinoline, cinnoline, quinazoline, naphthyridine, and pyridopyridine.

24. (Previously amended). A compound according to claim 10, wherein R_3 and R_4 are taken together to form a substitituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

25. (Previously amended). A compound according to claim 10, wherein R_3 and R_4 are taken together to form a substitituted or unsubstituted 3, 4, 5, 6, 7 or 8 member alicyclic ring.

26. (Previously amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is selected from the group consisting of an aldehyde, amide, ester, ketone, and carboxylic acid, each unsubstituted or further substituted through available valencies.

27. (Previously amended). A compound according to claim 10, wherein R_5 and R_6 are taken together to form a substitituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

28. (Currently amended). A compound according to claim 10, wherein R_5 and R_6 are taken together to form a substitituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered alicyclic ring.

29. (Previously amended). A compound according to claim 10, wherein R_6 and R_7 are taken together to form a substitituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

30. (Currently amended). A compound according to claim 10, wherein R_6 and R_7 are taken together to form a substitituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered alicyclic ring.

31. (Previously amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form a substitituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

32. (Currently amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form a substitituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered alicyclic ring.

33. (Previously amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form an imine having a substituent R_9 on the imine nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, and sulfonylamino, each unsubstituted or further substituted through available valencies.

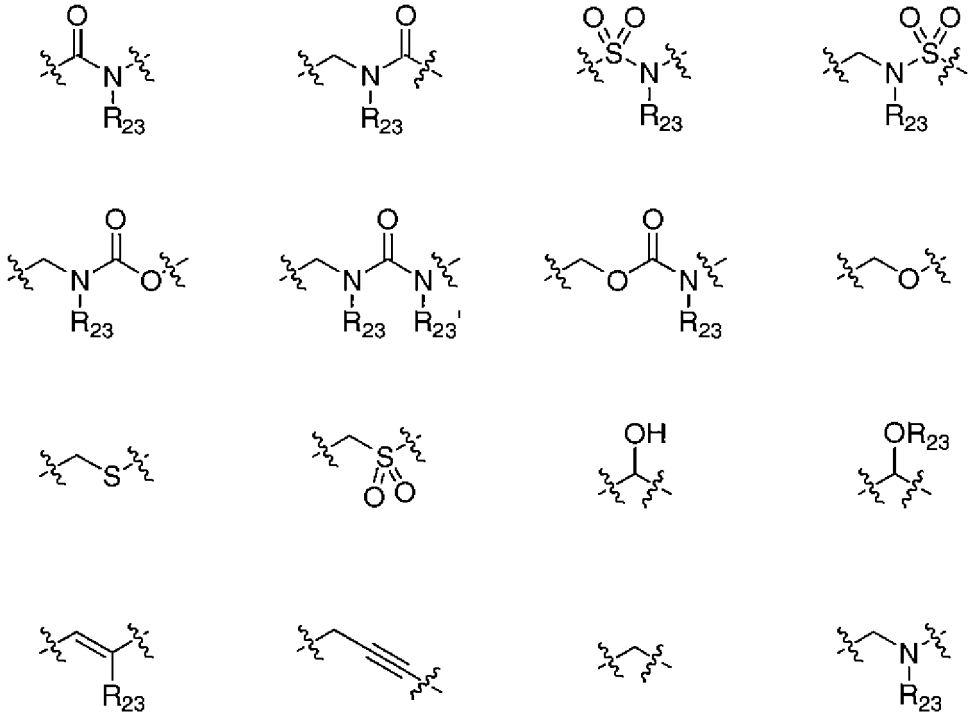
34. (Previously amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form an alkene substituent having the formula $=CR_{10}R_{11}$ where R_{10} and R_{11} are each independently selected from a group of substituents consisting of hydrogen, alkyl, aryl, alkylamino, arylamino, sulfonylamino, a carbonyl group, thiocarbonyl, and sulfonyl or where R_{10} and R_{11} are taken together to form an alkene, each unsubstituted or further substituted through available valencies.

35. (Previously amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form an alkene substituent having the formula $=CR_{10}R_{11}$ where R_{10} and R_{11} are taken together to form a substitituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, each unsubstituted or further substituted through available valencies.

36. (Currently amended). A compound according to claim 35 wherein R_{10} and R_{11} are taken together to form a substitituted or unsubstituted 3, 4, 5, 6, 7 or 8 ~~member~~ membered alicyclic ring.

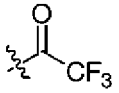
37 (Cancelled).

38. (Currently amended). A compound according to claim 10, wherein a portion of L that is attached to the carbon ring atom alpha to L comprises a moiety selected from the group consisting of:

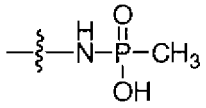


where R_{23} is a $C_{1\text{-}10}$ alkyl.

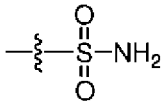
39. (Previously presented). A compound according to claim 10, wherein M is



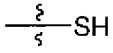
40. (Previously presented). A compound according to claim 10, wherein M is



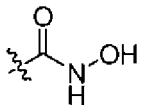
41. (Previously presented). A compound according to claim 10, wherein M is



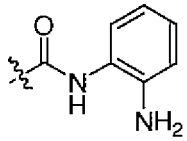
42. (Previously presented). A compound according to claim 10, wherein M is



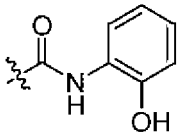
43. (Previously presented). A compound according to claim 10, wherein M is



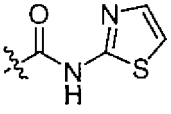
44. (Previously presented). A compound according to claim 10, wherein M is



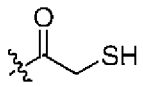
45. (Previously presented). A compound according to claim 10, wherein M is



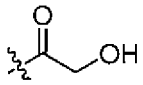
46. (Previously presented). A compound according to claim 10, wherein M is



47. (Previously presented). A compound according to claim 10, wherein M is



48. (Previously presented). A compound according to claim 10, wherein M is



49. (Currently amended). A compound according to claim 10, wherein ~~L is a substituted or unsubstituted chain of 3-9 atoms connecting the M substituent to the carbon atom alpha to the L substituent~~ the number of backbone atoms of the leader group moiety separating the M substituent from the carbon ring atom alpha to L is between 3 and 9.

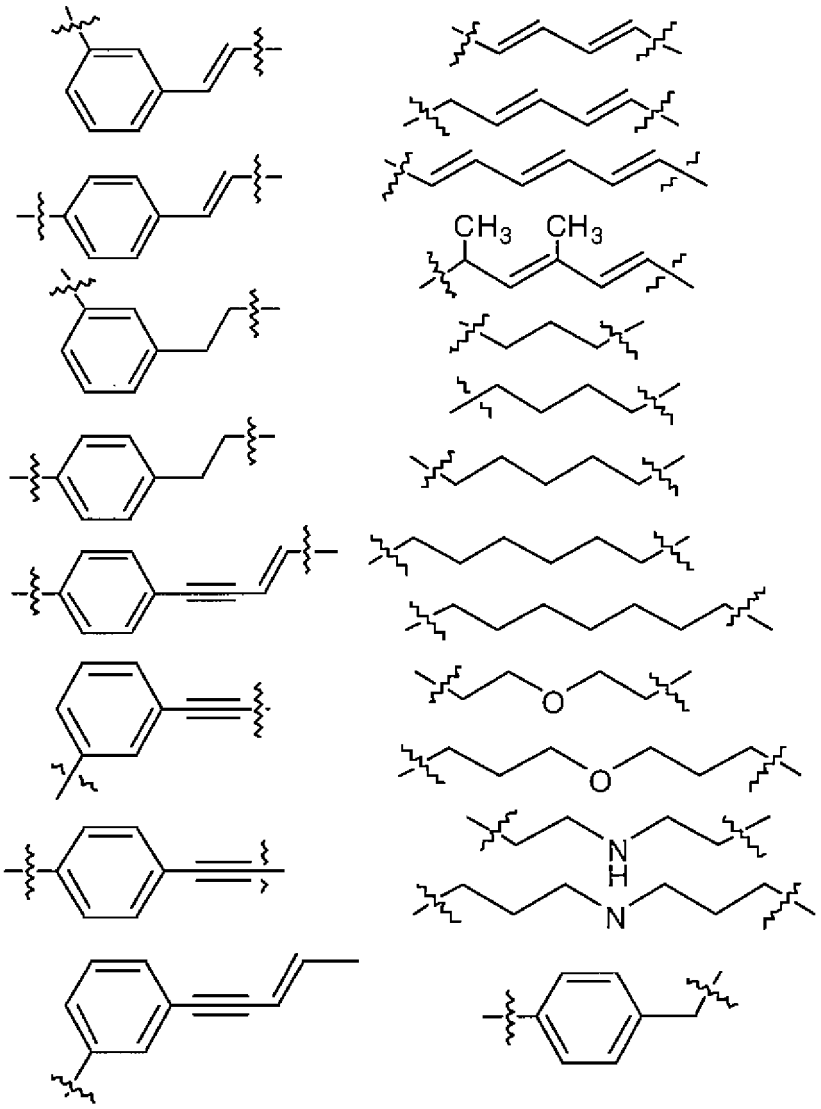
50. (Currently amended). A compound according to claim 10, wherein ~~L is a substituted or unsubstituted chain of 4-8 atoms connecting the M substituent to the carbon atom alpha to the L substituent~~ the number of backbone atoms of the leader group moiety separating the M substituent from the carbon ring atom alpha to L is between 4 and 8.

51. (Cancelled).

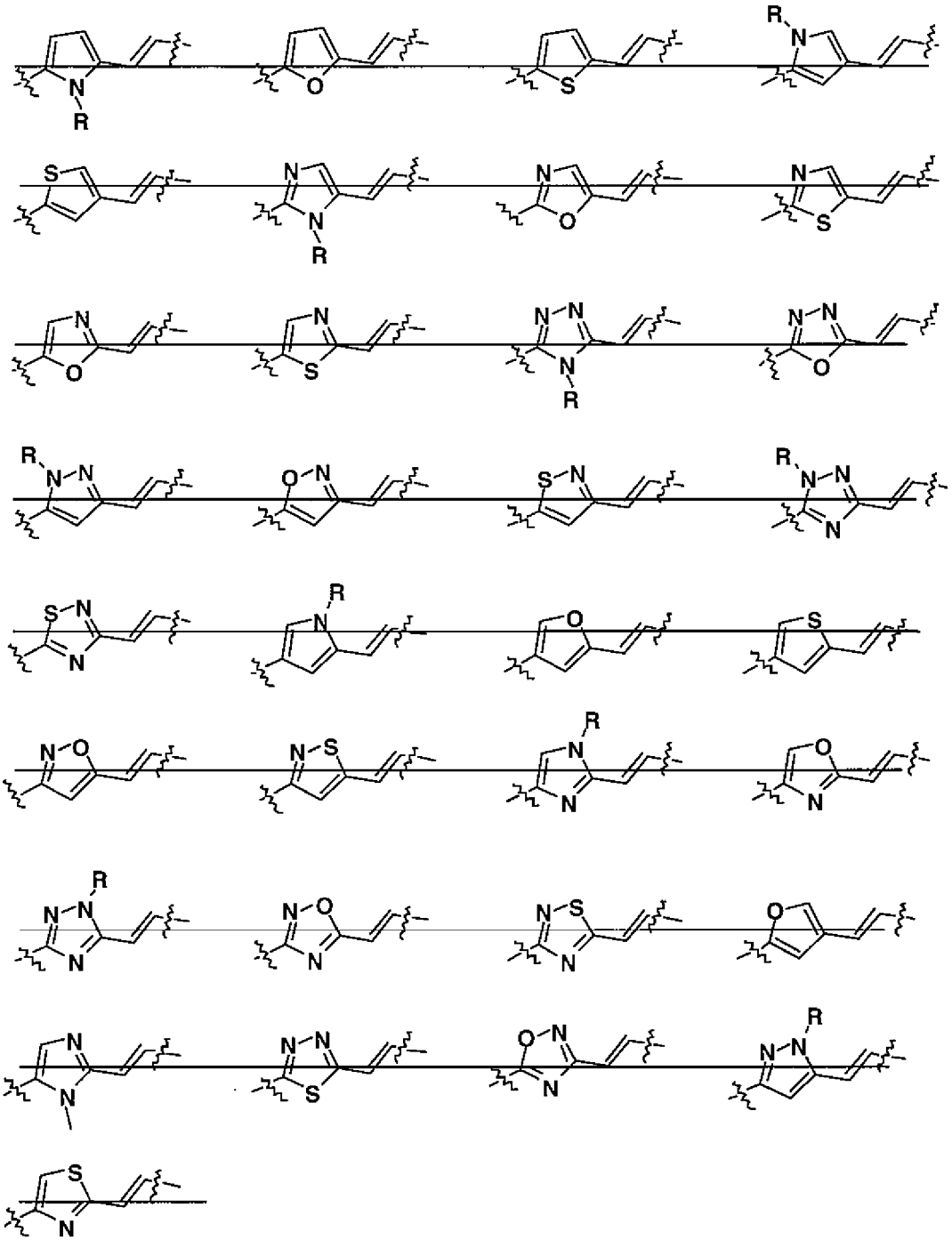
52. (Cancelled).

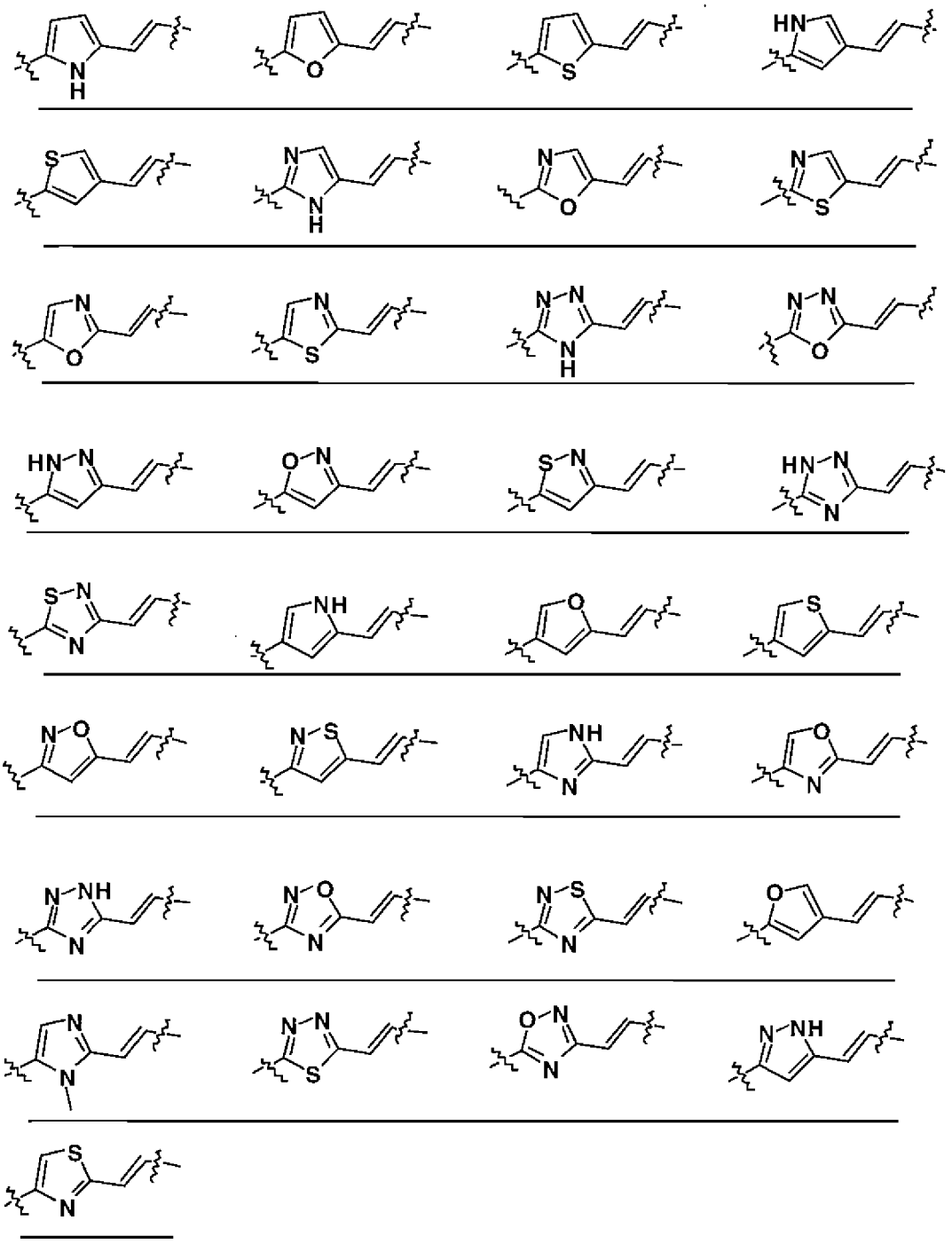
53. (Cancelled).

54. (Presently amended) A compound according to claim 10, wherein ~~L is selected from~~ a portion of the backbone atoms of L are substituted to form a member of the group consisting of

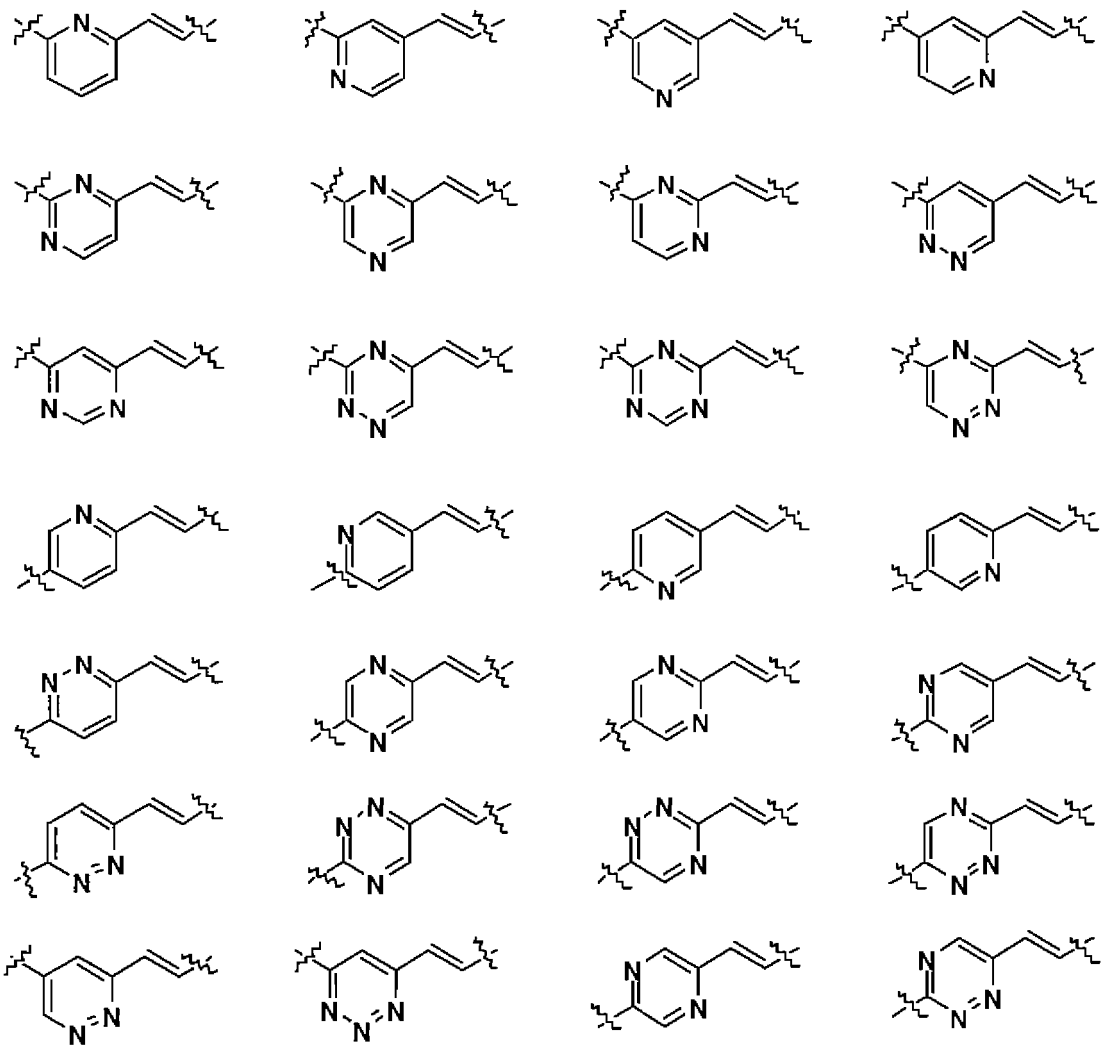


55. (Presently amended) A compound according to claim 10, wherein ~~L is selected from~~ a portion of the backbone atoms of L are substituted to form a member of the group consisting of





56. (Presently amended) A compound according to claim 10, wherein ~~L is selected from~~ a portion of the backbone atoms of L are substituted to form a member of the group consisting of



57. (Currently amended). A compound according to claim 10, wherein ~~one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent~~ two substituents of a same backbone atom or of different backbone atoms of L are taken together to form a three, four, five, six, seven, eight or nine membered ring.

58. (Currently amended). A compound according to claim 10, wherein ~~one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a portion of~~ two substituents of a same backbone atom or of different backbone atoms of L are taken together to form a three, four, five, six, seven, eight or nine membered saturated ring.

59. (Currently amended). A compound according to claim 10, wherein ~~one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a portion of~~ two substituents of a same backbone atom or of different backbone atoms of L are taken together to form a three, four, five, six, seven, eight or nine membered unsaturated ring.

60. (Currently amended). A compound according to claim 10, wherein ~~one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a portion of~~ two substituents of a same backbone atom or of different backbone atoms of L are taken together to form a three, four, five, six, seven, eight or nine membered aromatic ring.

61. (Currently amended) A compound according to claim 10, wherein one or more ~~of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent~~ backbone atoms of L form a portion of a ring selected from the group consisting of cyclopropyl, cyclohexane, cyclopentane, cyclopentene, cyclopentadiene, cyclohexane, cyclohexene, cyclohexadiene, phenyl, cycloheptane, cycloheptene, cycloheptadiene, cyclooctane, cyclooctene, and cyclooctadiene, each substituted or unsubstituted.

62. (Currently amended). A compound according to claim 10, wherein ~~at least a portion of the L substituent comprises~~ one or more backbone atoms of L form a portion of a moiety selected from the group consisting of phenyl, biphenyl-2-yl, 2-bromophenyl, 2-bromocarbonylphenyl, 2-bromo-5-fluorophenyl, 4-*tert*-butylphenyl, 4-carbamoylphenyl, 4-carboxy-2-nitrophenyl, 2-chlorophenyl, 4-chlorophenyl, 3-chlorocarbonylphenyl, 4-chlorocarbonylphenyl, 2-chloro-4-fluorophenyl, 2-chloro-6-fluorophenyl, 4-chloro-2-nitrophenyl, 6-chloro-2-nitrophenyl, 2,6-dibromophenyl, 2,3-dichlorophenyl, 2,5-dichlorophenyl, 3,4-dichlorophenyl, 2-difluoromethoxyphenyl, 3,5-dimethylphenyl, 2-ethoxycarbonylphenyl, 2-fluorophenyl, 2-iodophenyl, 4-isopropylphenyl, 2-methoxyphenyl,

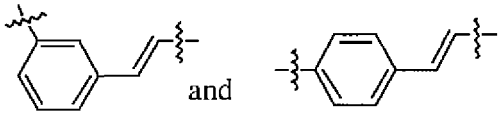
4-methoxyphenyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, 5-methyl-2-nitrophenyl, 4-methylsulfonylphenyl, naphth-2-yl, 2-nitrophenyl, 3-nitrophenyl, 4-nitrophenyl, 2,3,4,5,6-pentafluorophenyl, phenyl, 2-trifluoromethoxyphenyl, 3-trifluoromethoxyphenyl, 4-trifluoromethoxyphenyl, 2-trifluoromethylphenyl, 3-trifluoromethylphenyl, 4-trifluoromethylphenyl, 2-trifluoromethylsulfanylphenyl, and 4-trifluoromethylsulfanylphenyl, each substituted or unsubstituted.

63. (Currently amended). A compound according to claim 10, wherein ~~at least a portion of the L substituent comprises~~ one or more backbone atoms of L form a portion of a moiety selected from the group consisting of furan, thiofuran, pyrrole, isopyrrole, 3-isopyrrole, pyrazole, isoimidazole, triazole, isoxazole, oxazole, thiazole, isothiazole, oxadiazole, oxatriazole, pyridine, pyridazine, pyrimidine, pyrazine, triazine, benzofuran, isobenzofuran, benzothiofuran, isobenzothiofuran, indole, isobenzazole, quinoline, isoquinoline, cinnoline, quinazoline, naphthyridine, and pyridopyridine, each substituted or unsubstituted.

64. (Currently amended). A compound according to claim 10, wherein ~~at least a portion of the L substituent comprises~~ one or more backbone atoms of L form a portion of a moiety selected from the group consisting of 4-amino-2-hydroxypyrimidin-5-yl, dibenzofuranyl, benzothiazol-2-yl, 1*H*-benzoimidazol-2-yl, 2-bromopyrid-5-yl, 5-bromopyrid-2-yl, 4-carbamoylthiazol-2-yl, 3-carboxypyrid-4-yl, 5-carboxy-2,6-dimethylpyrid-3-yl, 3,5-dimethylisoxazol-4-yl, 5-ethoxy-2,6-dimethylpyrid-3-yl, 5-fluoro-6-hydroxypyrimidin-4-yl, fur-2-yl, fur-3-yl, 5-hydroxy-4,6-dimethylpyrid-3-yl, 8-hydroxy-5,7-dimethylquinolin-2-yl, 5-hydroxymethylisoxazol-3-yl, 3-hydroxy-6-methylpyrid-2-yl, 3-hydroxypyrid-2-yl, 1*H*-imidazol-2-yl, 1*H*-imidazol-4-yl, 1*H*-indol-3-yl, isothiazol-4-yl, isoxazol-4-yl, 2-methylfur-3-yl, 5-methylfur-2-yl, 1-methyl-1*H*-imidazol-2-yl, 5-methyl-3*H*-imidazol-4-yl, 5-methylisoxazol-3-yl, 5-methyl-2*H*-pyrazol-3-yl, 3-methylpyrid-2-yl, 4-methylpyrid-2-yl, 5-methylpyrid-2-yl, 6-methylpyrid-2-yl, 2-methylpyrid-3-yl, 2-methylthiazol-4-yl, 5-nitropyrid-2-yl, 2*H*-pyrazol-3-yl, 3*H*-pyrazol-4-yl, pyridazin-3-yl, pyrid-2-yl, pyrid-3-yl, pyrid-4-yl, 5-pyrid-3-yl-2*H*-[1,2,4]triazol-3-yl, pyrimidin-4-yl, pyrimidin-5-yl, 1*H*-pyrrol-3-yl, quinolin-2-yl, 1*H*-tetrazol-5-yl, thiazol-2-yl, thiazol-5-yl, thien-2-yl, thien-3-yl,

2*H*-[1,2,4]triazol-3-yl, 3*H*-[1,2,3]triazol-4-yl, 5-trifluoromethylpyrid-2-yl, ~~, and the like. Suitable protecting groups include tert-butoxycarbonyl, benzyloxycarbonyl, lenzyl, 4-methodxybenzyl, and 2-nitrobenzyl.~~

65. (Currently amended). A compound according to claim 10, wherein a portion of ~~the~~ L ~~substituent~~ that is attached to M is ~~meta or para cinnamate~~ selected from the group consisting of



and

66. (New). A compound according to claim 57, wherein the three, four, five, six, seven, eight or nine membered ring formed by the substituents of the one or more backbone atoms of L is selected from the group of rings consisting of substituted or unsubstituted aryl, heteroaryl, bicycloaryl and bicycloheteroaryl rings.

67. (New). A compound according to claim 10, wherein a portion of the backbone atoms of L forms a member selected from the group consisting of -(CH_2)n,- where n is an integer from 1 to 10; -$CH(CH_3)$-, -$CH(CH_3)CH_2$-, -$CH_2CH(CH_3)$-, -$CH(CH_3)CH_2CH_2$-, -$CH_2CH(CH_3)CH_2$-, -$CH_2CH_2CH(CH_3)$-, -$CH(CH_3)CH_2CH_2CH_2$-, -$CH_2CH(CH_3)CH_2CH_2$-, -$CH_2CH_2CH(CH_3)CH_2$-, -$CH_2CH_2CH_2CH(CH_3)$-, -$CH(CH_3)CH_2CH_2CHCH_2$-, -$CH_2CH(CH_3)CH_2CH_2CH_2$-, -$CH_2CH_2CH(CH_3)CH_2CH_2$-, -$CH_2CH_2CH_2CH(CH_3)CH_2$-, -$CH_2CH_2CH_2CH_2CH(CH_3)$-, -$CH(CH_2CH_3)$-, -$CH(CH_2CH_3)CH_2$-, -$CH_2CH(CH_2CH_3)$-, -$CH(CH_2CH_3)CH_2CH_2$-, -$CH_2CH(CH_2CH_3)CH_2$-, -$CH_2CH_2CH(CH_2CH_3)$-, -$CH(CH_2CH_3)CH_2CH_2CH_2$-, -$CH_2CH(CH_2CH_3)CH_2CH_2$-, -$CH_2CH_2CH(CH_2CH_3)CH_2$-, -$CH_2CH_2CH_2CH(CH_2CH_3)$-, -$CH_2CH_2CH(CH_2CH_3)CH_2CH_2$-, -$CH_2CH_2CH_2CH(CH_2CH_3)CH_2$-, -$CH(CH_2CH_3)CH_2CH_2CH_2CH_2$-, -$CH_2CH(CH_2CH_3)CH_2CH_2CH_2$-, -$CH_2CH_2CH_2CHCH(CH_2CH_3)$, -CH=CH-, -$CH=CHCH_2$-, -$CH_2CH=CH$-, -$CH=CHCHCH_2$-, -$CH_2CH=CHCH_2$-, -$CH_2CH_2CH=CH$-, -$CH=CHCH_2CH_2CH_2$-, -$CH_2CH=CHCH_2CH_2$-, -$CH_2CH_2CH=CHCH_2$-, -$CH_2CH_2CH_2CH=CH$-, -$CH=CHCHCH_2CH_2CH_2$-, -$CH_2CH=CHCH_2CH_2CH_2$-, -$CH_2CH_2CH=CHCH_2CH_2$-, -$CH_2CH_2CH_2CH=CHCH_2$-, -$CH_2CH_2CH_2CHCH=CH$-, -$C(CH_3)=CH$-, -$CH=C(CH_3)$-, -$C(CH_3)=CHCH_2$-,

-CH=C(CH_3)CH_2-, -CH=CHCH(CH_3)-, -CH(CH_3)CH=CH-, -CH_2C(CH_3)=CH-,
-CH_2CH=C(CH_3)-, -CH=CHCH=CH-, -CH=CHCH=$CHCH_2$-, -CH_2CH=CHCH=CH-,
-CH=CHCH_2CH=CH-, -CH=CHCH=$CHCH_2CH_2$-, -CH=$CHCH_2$CH=$CHCH_2$-,
-CH=$CHCH_2CH_2$CH=CH-, -CH_2CH=CHCH=$CHCH_2$-, -CH_2CH=$CHCH_2$CH=CH,
-CH_2CH_2CH=CHCH=CH-, -C(CH_3)=CHCH=CH -, -CH=C(CH_3)CH =CH -,
-CH=CHC(CH_3)=CH-, -CH=CHCH=C(CH_3)-, -C≡C-, -C≡CCH_2-, -CH_2C≡C-, -C≡CCH(CH_3)-,
-CH(CH_3)C≡C-, -C=CCH_2CH_2-, -CH_2C-CCH_2-, -CH_2CH_2C=C-, -C≡CCH(CH_3)CH_2-,
-C≡CCH_2CH(CH_3)-, -CH(CH_3)C=CCH_2-, -CH_2C≡CCH(CH_3)-, -CH(CH_3)CH_2C≡C-,
-CH_2CH(CH_3)C≡C-, -C≡CCH=CH-, -CH=CHC≡C-, -C≡CC≡C-, -C≡$CCH_2CH_2CH_2$-,
-$CH_2CH_2CH_2$C≡C-, -C≡$CCH_2CH_2CH_2CH_2$-, -$CH_2CH_2CH_2CH_2$C≡C-, -C≡CCH=CHCH=CH-,
-CH=CHC≡C-CH=CH-, -CH=CHCH=CHC≡C-, -C(CH_3)=CHC≡C-, -CH=C(CH_3)C≡C-,
-C≡CC(CH_3)=CH-, and -C≡CCH=C(CH_3)-.